small fruit and grain." The same sweeping ignorance and prejudice characterizes her account of the crow, of which she says: "This is another bird that you may hunt from your woods, shoot (if you can) in the fields and destroy with poisoned grain. Here he has not a single good mark against his name. He is a cannibal, devouring both the eggs and young of insect-destroying song-birds." As a matter of fact, the eggs and young of wild birds and poultry together form less than one per cent. of the food of the crow, as determined by the examination of about a thousand stomachs in the U. S. Department of Agriculture. So with grain; sprouting corn forms only two per cent. of the entire food, most of the corn eaten by crows being waste grain picked up, chiefly in winter, in fields and other places where its consumption is no loss to the farmer. On the other hand, mice and other injurious mammals form $1\frac{1}{2}$ per cent. of the food of crows; and insects no less than $23\frac{1}{2}$ per cent.

The colored plates are execrable. Most of them are cheap, coarse, dauby caricatures, taken second-hand from Audubon, who would turn in his grave if he saw them. In addition to these, there are five uncolored process reproductions of water birds and birds of prey. The latter are from Dr. Fisher's *Hawks and Owls of the United States* (published by the U. S. Department of Agriculture) and, though poor, are by far the best illustrations in the book.

Excepting the plates, the book is neatly gotten up and well printed. A novel and useful feature is the insertion of the common name of the bird in heavy-face type at the top corner of the page, in the place usually occupied by the pagination.

On the whole, Mrs. Wright's '*Birdcraft*' may be recommended as a source of pleasure and assistance to the many lovers of nature who are trying to learn more about our common birds. C. H. M.

Anleitung zur Microchemischen Analyse: Von H. Behrens, Professor an der Polytechnischen Schule in Delft. Mit 92 Figuren im Text. Hamburg, Leopold Voss. 1895. 224 pp.

Professor Behrens first wrote this book in French, and it was published in 1893. An English translation by Professor Judd appeared soon after. That the author published a German edition so soon speaks for the value of the book. Professor Behrens' text-book is the only one, as indeed he is the chief authority, on this new and important subject. The first half of the book describes the reactions of the elements, giving plates of the crystalline precipitates as seen through the microscope. Part Second treats of the systematic analysis of water, rocks, ores, alloys, and compounds of the rare elements. The chapter on the micro-chemical examination of rocks, by study of slides and of powdered rock is very interesting; indeed, for petrographic research the manual is invaluable, but it is also of great value to the metallurgist in the study of ores and alloys, and to the general chemist in the ordinary run of chemical analysis. E. Renouf.

NOTES AND NEWS.

THE AMERICAN ASSOCIATION.

The preliminary announcement of the forty-fourth meeting of the American Association for the Advancement of Science, to be held in Springfield, Mass., August 28 to September 7, 1895, has now been issued. The arrangements promise an interesting and successful meeting.

The first general session will be held on the morning of Thursday the 29th. This will give Friday, Monday, Tuesday and Wednesday as the four days entirely devoted to the reading of papers in the sections. Saturday will be given to excursions in the vicinity of Springfield, and more dis-